

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A delay module, comprising:
a signal quality detector configured to detect a signal quality between a power supply line and a system component;
a delay generator configured to generate a delay in response to the signal quality detector detecting an insufficient signal quality, wherein the signal quality detector detects insufficient signal quality if the signal quality on the power supply line is unstable over a period of time, the signal quality detector being further configured to again detect the signal quality between the power supply line and the system component upon expiration of the delay; and
a switch configured to selectively close upon the signal quality detector detecting sufficient signal quality.
2. (Original) The delay module of claim 1, wherein the delay generator performs an iteration of the delay generation each time the signal quality detector detects insufficient signal quality.
3. (Original) The delay module of claim 2, wherein the delay is randomly selected between 0 and $2^{n-1}T$ where n is an iteration number and T is a period from which a delay is selected on a first iteration of generating the delay.
4. (Original) The delay module of claim 1, wherein the switch disconnects the power supply line from the system component upon the signal quality detector detecting insufficient signal quality.

5. (Currently Amended) The delay module of claim 1, wherein the signal quality detector detects [[the]] insufficient signal quality if the signal quality on the power supply line is also less than a threshold signal quality.

6. (Original) The delay module of claim 1, further comprising a timer configured to await the delay and to cause the signal quality detector to again detect the signal quality upon expiration of the delay.

7. (Original) The delay module of claim 1, wherein the system component is a disk drive.

8. (Currently Amended) A system, comprising:
a power supply line;
at least one delay module, each delay module including:
a signal quality detector configured to detect a signal quality between the power supply line and a system component;
a delay generator configured to generate a delay in response to the signal quality detector detecting an insufficient signal quality, wherein the signal quality detector detects insufficient signal quality if the signal quality on the power supply line is unstable over a period of time, the signal quality detector being further configured to again detect the signal quality between the power supply line and the system component upon expiration of the delay;
and

a switch ~~coupled~~ configured to close upon the signal quality detector detecting sufficient signal quality; and

at least one system component each coupled to the power supply line via a corresponding one of the at least one delay module.

9. (Original) The system of claim 8, wherein each delay generator performs an iteration of the delay generation each time the corresponding signal quality detector detects insufficient signal quality between the power supply line and the corresponding system component.

10. (Original) The system of claim 9, wherein the delay is randomly selected between 0 and $2^{n-1}T$ where n is an iteration number and T is a period from which a delay is selected on a first iteration of generating the delay.

11. (Original) The system of claim 8, wherein the switch of the delay module disconnects the power supply line from the corresponding system component upon the corresponding signal quality detector detecting insufficient signal quality between the power supply line and the corresponding system component.

12. (Currently Amended) The system of claim 8, wherein the signal quality detector detects [[the]] insufficient signal quality if the signal quality on the power supply line is also less than a threshold signal quality.

13. (Currently Amended) [[The]] A system of claim 8, comprising:
a power supply line;
at least one delay module, each delay module including:
a signal quality detector configured to detect a signal quality between the
power supply line and a system component;
a delay generator configured to generate a delay in response to the signal
quality detector detecting an insufficient signal quality, wherein the signal quality detector
detects the insufficient signal quality if the signal quality on the power supply line is unstable
during a predetermined period of time by comparing a current signal quality and a delay signal
quality, the signal quality detector being further configured to again detect the signal quality
between the power supply line and the system component upon expiration of the delay; and
a switch configured to close upon the signal quality detector detecting
sufficient signal quality; and
at least one system component each coupled to the power supply line via a
corresponding one of the at least one delay module.

14. (Original) The system of claim 8, wherein each delay module further includes a timer configured to await the delay and to cause the signal quality detector to again detect the signal quality upon expiration of the delay.

15. (Original) The system of claim 8, wherein each of the system components is a disk drive.

16. (Currently Amended) A power management apparatus, comprising:
~~signal quality detecting~~ means for detecting signal quality on a power supply line;
~~delay generating~~ means for generating a delay in response to the signal quality detecting means detecting insufficient signal quality, wherein the signal quality detecting means detects insufficient signal quality if the signal quality on the power supply line is unstable over a period of time, the signal quality detecting means for again detecting the signal quality on the power supply line upon expiration of the delay generated by the delay generating means; and
switching means for one of disconnecting to the power supply line upon the signal quality detecting mean detecting insufficient signal quality and connecting to the power supply line upon the signal quality detecting means detecting sufficient signal quality.

17. (Currently Amended) The power management apparatus of claim 16, wherein the delay generating means performs an iteration of the delay generation each time the signal quality ~~detector~~ detecting means detects insufficient signal quality.

18. (Original) The power management apparatus of claim 17, wherein the delay generating means is for generating a random delay between 0 and $2^{n-1}T$ where n is an iteration number and T is a period from which a random delay is generated on a first iteration of generating the random delay.

19. (Original) The power management apparatus of claim 16, wherein the switching means disconnects to the power supply line upon the signal quality detecting means detecting insufficient signal quality on the power supply line.

20. (Currently Amended) The power management apparatus of claim 16, wherein the signal quality detecting means detects ~~[[the]]~~ insufficient signal quality if the signal quality on the power supply line is also less than a threshold signal quality.

21. (Currently Amended) ~~[[The]]~~ A power management apparatus of ~~claim-16~~,
comprising:
signal quality detecting means for detecting signal quality on a power supply line;

delay generating means for generating a delay in response to the signal quality detecting means detecting insufficient signal quality, wherein signal quality detecting means detects the insufficient signal quality if the signal quality on the power supply line is unstable during a predetermined period of time by comparing a current signal quality and a delay signal quality, the signal quality detecting means for again detecting the signal quality on the power supply line upon expiration of the delay generated by the delay generating means;

switching means for one of disconnecting to the power supply line upon the signal quality detecting mean detecting insufficient signal quality and connecting to the power supply line upon the signal quality detecting means detecting sufficient signal quality.

22. (Currently Amended) The power management apparatus of claim 16, further comprising a timing means to await the delay and to cause the signal quality ~~detector~~ detecting means to again detect the signal quality upon expiration of the delay.

23. (Canceled)

24. (Currently Amended) A method for power management, comprising:
detecting a power signal quality between a power supply line and a power-utilizing component;

generating a delay in response to detecting an insufficient signal quality, wherein the detecting detects insufficient signal quality if the signal quality is unstable over a period of time, the detecting being repeated upon expiration of the delay; and

switching to one of disconnect the power supply line to the power-utilizing component upon the detecting of insufficient signal quality and connect the power supply line to the power-utilizing component upon the detecting of sufficient signal quality.

25. (Original) The method of claim 24, wherein an iteration of the generating the delay is performed each time the detecting detects insufficient signal quality.

26. (Original) The method of claim 25, wherein the delay is randomly selected between 0 and $2^{n-1}T$ where n is an iteration number and T is a period from which a random delay is generated on a first iteration of generating the random delay.

27. (Original) The method of claim 24, wherein the switching includes disconnecting the power supply line from the power-utilizing component upon the detecting of insufficient signal quality.

28. (Currently Amended) The method of claim 24, wherein the detecting detects insufficient signal quality if the signal quality on the power supply line is also less than a threshold signal quality.

29. (Currently Amended) ~~[[The]]~~ A method of claim 24, for power management, comprising:

detecting a power signal quality between a power supply line and a power-utilizing component;

generating a delay in response to detecting an insufficient signal quality, wherein the detecting detects unstable signal quality during a predetermined period of time by comparing a current power signal and a delay power signal, the detecting being repeated upon expiration of the delay; and

switching to one of disconnect the power supply line to the power-utilizing component upon the detecting of insufficient signal quality and connect the power supply line to the power-utilizing component upon the detecting of sufficient signal quality.

30. (Original) The method of claim 24, further comprising awaiting the delay and upon expiration of the delay, repeating the detecting of the signal quality between the power supply line and the power-utilizing component.

31. (Original) The method of claim 24, wherein the power-utilizing component is a disk drive.

32. (Currently Amended) A resource management system, comprising:
a delay module, including:

a resource detector configured to detect a resource supply quality between a resource supply and a resource receiving component;

a delay generator configured to generate a delay in response to the resource detector detecting an insufficient resource supply quality, wherein the resource detector

detects insufficient signal quality if the resource supply quality is unstable over a period of time,
the resource detector being further configured to again detect the resource supply quality
between the ~~source~~ resource supply and the resource receiving component upon expiration of the
delay; and

a switch configured to selectively close upon the resource detector
detecting sufficient resource supply.

33. (Original) The resource management system of claim 32, further comprising a
plurality of the resource receiving components and a plurality of the delay modules, each
resource receiving component corresponding to one of the delay modules.

34. (Original) The resource management system of claim 32, wherein the delay
generator is a random delay generator configured to generate a random delay.

35. (Currently Amended) A method for resource management, comprising:
detecting a resource supply quality between a resource supply line and a resource-
utilizing component;

disconnecting the resource-utilizing component from the resource supply line
upon detecting an insufficient resource supply quality, wherein the resource supply quality is
insufficient if the resource supply quality is unstable over a period of time;

generating a delay upon detecting the insufficient resource supply quality, the
detecting being repeated upon expiration of the delay; and

connecting the resource-utilizing component to the resource supply line upon the
detecting of sufficient resource supply quantity.